



BEng/BEng(Hons) Fire Risk Engineering

**PROGRAMME SPECIFICATION
2015-2016**

GLASGOW CALEDONIAN UNIVERSITY

Programme Specification Pro-forma

1. GENERAL INFORMATION

1. Programme Title:	BEng/BEng (Hons) Fire Risk Engineering
2. Final Award:	BEng (Hons) Fire Risk Engineering
3. Exit Awards:	CertHE/DipHE/BEng Fire Risk Engineering
4. Awarding Body:	Glasgow Caledonian University (GCU)
5. Approval Date:	June 2015
6. School:	Engineering and Built Environment (EBE)
7. Host Division/Dept:	Construction and Surveying
8. UCAS Code:	H121
9. PSB Involvement:	IFE
10. Place of Delivery:	GCU
11. Subject Benchmark Statement:	Engineering
12. Dates of PSP preparation/revision:	July 2015

2. EDUCATIONAL AIMS OF THE PROGRAMME

General Aims:

- (a) to provide the construction industry with well educated, competent Fire Risk Engineers capable of responding to industry's current and future needs
- (b) to prepare students for their careers, further personal study, and for personal and professional development

Aims of the Programme at BEng (Hons) Fire Risk Engineering level exit point:

- (a) to provide students with a high quality undergraduate degree programme comprising Fire Engineering competencies
- (b) to deliver a demanding programme which equips students with key knowledge, comprehension and skills competency essential for Engineers in construction.
- (c) to provide an education base and degree programme which is recognised as an approved course in part meeting the academic criteria for CEng, as defined in The UK Standard for Professional Engineering Competence (UK-SPEC) as supported by the Institution of Fire Engineers
- (d) to provide students with the necessary academic knowledge and professional ability to be applied in a challenging career in the engineering profession
- (e) to enable students to develop intellectual strengths and creative powers which are flexible and adaptable to the rapidly changing demands of industry and society
- (f) to enable students to develop and maintain personal transferable skills
- (g) to enable students to develop good judgement and innovative thinking processes by the development and application of logical analysis, evaluation and synthesis techniques and
- (h) to introduce students to research methods and a learning experience which promotes and encourages a culture of lifelong learning throughout their career

4. PROGRAMME STRUCTURES AND REQUIREMENTS, LEVELS, MODULES, CREDITS AND AWARDS

This programme is designed to provide for both full-time and part-time study.

Each level of the programme consists of six modules, or the equivalent, totalling 120 credits. The delivery structure for the full-time route utilises two trimesters per academic session, with 60 SHE credits per trimester. The part-time route utilises more variable levels of entry more often than the full-time mode but, in general, the part-time route consists usually of four modules per academic year, or the equivalent, totalling 80 credits, ie 40 credits per trimester. The following tables illustrate the Full-Time and Part-Time Programme Structures.

FULL-TIME ROUTE

Full Time Under-Graduate		
SHE1 Level		
Module Code	Module Title	Credit
M1G121961/AB	Applied Mathematics 1	20
M1H120822/AB	Structural Mechanics (Statics & Dynamics)	20
M1K203077/AB	Professional Orientation and Practice	20
M1K902905/AB	Environmental Physics & Design	20
M1H120901/AB	Fluid Mechanics & Thermodynamics	20
M1K2218844/AB	Construction Materials	20
Exit Award – Certificate of Higher Education		120
SHE2 Level		
Module Code	Module Title	Credit
M2H120263/AB	Fire Engineering Analysis & ASET	40
M2H120264/AB	Required Safe Egress Time (RSET)	20
M2K221185/AB	Design and Regulation 1	20
M2H123702/A	Introduction to Fire Engineering Mathematics and Structures	20
M2H120266/B	Fire Engineering Design & Risk Management	40
Exit Award – Diploma of Higher Education		260

SHE3 Level		
Module Code	Module Title	Credit
M3H121217/A	Suppression Systems Design	20
M3H123199/B	Fire Dynamics	20
M3H121214/B	Structural Fire Protection	20
M3K221186/B	Design and Regulation 2	20

M3K220211/A	Managed Project Learning	20
MHH123701/A	Introduction to CAD and CFD	20
Exit Award – BEngFire Risk Engineering		380
SHEH Level		
Module Code	Module Title	Credit
MHK202864/A	Dynamic Systems Design 2	20
MHH102870/A	Evacuation Systems Design	20
MHH123843/B	Fire Engineering Design and Risk Management 2	20
MHH102871/B	Fire Risk Assessment	20
MHK221198/AB	Dissertation	40
Exit Award – BEng (Hons) BSc Fire Risk Engineering		500

Part-time Undergraduate

SHE1 Level		
Module Code	Module Title	Credit
None	There is no Level 1 entry provision for PT students. Students will have advanced entry based on relevant previous experience & / or education. Typically a student with a relevant HND/HNC may be accepted Level 1/PT Yr 2 or Level 2/PT Yr 3 of the part-time programme.	RPL
Exit Award – None		60
SHE2 Level 2/3 Year 2 PT		
Module Code	Module Title	Credit
C M1G121961/AB	Applied Mathematics 1	20
C M3K220211/A	Managed Project Learning	20
O M3K221186/B	Design and Regulation 2	20
O M3H123717/C	Project and Programme Management Principles	20
		(60)
Exit Award – Certificate of Higher Education		120
SHE3 Level 2/3 Year 3 PT		
Module Code	Module Title	Credit
C M2H120263/AB	Fire Engineering Analysis & ASET	40

C	M2H120264/AB	Required Safe Egress Time (RSET)	20
C	M2H120266/B	Fire Engineering Design & Risk Management	40
C	M2H123702/A	Introduction to Fire Engineering Mathematics and Structures	20
Exit Award – Diploma of Higher Education			240

SHEH Level 3/4 Year 4 PT			
C	Module Code	Module Title	Credit
C	MHH123701/A	Introduction to CAD and CFD	20
C	M3H121217/A	Suppression Systems Design	20
C	M3H123199/B	Fire Dynamics	20
C	M3H1212141/B	Structural Fire Protection	20
C	M3K220514/AB	Work Based Learning (FSDR)	20
O	M3K221186/B	Design and Regulation 2	20
O	M3H123717/C	Project and Programme Management Principles	20
Exit Award – BEng Fire Risk Engineering			360

SHEH Level 4 Year 5 PT			
	Module Code	Module Title	Credit
C	MHK202864/A	Dynamic Systems Design 2	20
C	MHH102870/A	Evacuation Systems Design	20
C	MHH123843/B	Fire Engineering Design and Risk Management 2	20
O	MHH102871/B	Fire Risk Assessment	20
O	MHH123703/B	Fire Investigation	20
C	MHK221198/AB	Dissertation (2011)	40
Exit Award – BEng (Hons) Fire Risk Engineering			480

8. ASSESSMENT REGULATIONS

The University Assessment Regulations current at May 2014 apply to the Programme in all respects. There are no programme-specific regulations which deviate from the standard University Assessment Regulations. The Programme's structure, progression, credits and awards are wholly consistent with the GCU Qualifications Framework.

Awards:

For the awards of Certificate of Higher Education, Diploma of Higher Education, BEng Fire Risk Engineering and BEng (Hons) Fire Risk Engineering

- Minimum pass mark of 40% for each taught module
- Minimum pass mark of 40% for Dissertation/Honours Project module
- To qualify for an award of Certificate of Higher Education, students must complete all the programme requirements and obtain 120 SHE credits, of which a minimum of 90 must be SHE1
- To qualify for an award of Diploma of Higher Education, students must complete all the programme requirements and obtain 240 SHE credits, of which a minimum of 90 must be SHE2
- To qualify for an award of BEng in Fire Risk Engineering, students must complete all the programme requirements and obtain 360 SHE credits, of which a minimum of 90 must be SHE3
- To qualify for an award of BEng (Hons) in Fire Risk Engineering, students must complete all the programme requirements and obtain 480 SHE credits, of which a minimum of 90 must be SHEH

Regulations for Distinction:

The Programme complies with the University Assessment Regulations in respect of the award of Distinction. To be awarded a Certificate/Diploma/BEng with Distinction, a student must obtain an overall average of 70% or more with no individual module mark below 55%, all at the first attempt.

Role of External Assessor:

Senate appoints External Assessors to the Assessment Board (AB) on the basis of nominations from Schools and approval through the University QA and QE processes.

The duties of an External Assessor will include the following:

- To moderate the work of the internal assessors in respect of the assessments under his/her jurisdiction
- To attend Assessment Boards at which the results of final stage assessment will be determined
- To satisfy himself/herself that the work and decisions of the Assessment Board(s) are consistent with the policies and regulations of the University and best practice in higher education
- To ensure that students are assessed within the regulations approved by the University for the progression of students and to inform the University on any matter which, in his/her view, mitigates against the maintenance of proper academic standards
- To report annually to the Clerk to Senate on the standards attained by students on the programme and on other matters which may seem appropriate for their report